

Pipeline and Hazardous Materials Safety Administration East Building, PHH – 30

1200 New Jersey Avenue, Southeast
Washington, D.C. 20590

DOT-SP 13336 (SECOND REVISION)

EXPIRATION DATE: October 31, 2013

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. <u>GRANTEE</u>: Renaissance Industries Sharpsville, PA

2. PURPOSE AND LIMITATIONS:

- a. This special permit authorizes the manufacture, mark, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT Specification 3E cylinder, except as specified herein, for the transportation in commerce of the materials authorized by this special permit. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
- b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.302a(a)(1), § 173.304a, and § 175.3 in that non-DOT specification cylinders are not authorized, except as specified herein.

- 5. BASIS: This special permit is based on the application of Renaissance Industries, Inc., dated September 22, 2009, submitted in accordance with \S 107.109.
- 6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description				
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group	
1-Chloro-1,2,2,2- tetrafluoroethane or Refrigerant gas R 124	2.2	UN1021	N/A	
1-Chloro-2,2,2-trifluoroethane or Refrigerant gas R 133a	2.2	UN1983	N/A	
Chlorodifluorobromomethane or Refrigerant gas R 12B1	2.2	UN1974	N/A	
Chlorodifluoromethane or Refrigerant gas R 22	2.2	UN1018	N/A	
Chlorotrifluoromethane or Refrigerant gas R 13	2.2	UN1022	N/A	
1,1-Difluoroethane or Refrigerant gas R 152a	2.1	UN1030	N/A	
1,1-Difluoroethylene or Refrigerant gas R 1132a	2.1	UN1959	N/A	
1,2-Dichloro-1,1,2,2- Tetrafluoroethane or Refrigerant gas R 114	2.2	UN1958	N/A	
Air, compressed	2.2	UN1002	N/A	
Bromotrifluoromethane or Refrigerant gas R 13B1	2.2	UN1009	N/A	

Hazardous Materials Description				
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group	
Chlorodifluoromethane and chloropentafluoroethane mixture or Refrigerant gas R 502 with fixed boiling point, with aproximately 49 percent chlorodifluoromethane	2.2	UN1973	N/A	
Chloropentafluoroethane or Refrigerant gas R 115	2.2	UN1020	N/A	
Dichlorodifluoromethane and difluoroethane azeotropic mixture or Refrigerant gas R 500 with approximately 74 percent dichlorodifluoromethane	2.2	UN2602	N/A	
Dichlorodifluoromethane or Refrigerant gas R 12	2.2	UN1028	N/A	
Dichlorofluoromethane or Refrigerant gas R 21	2.2	UN1029	N/A	
Ethylene, compressed	2.1	UN1962	N/A	
Hexafluoroethane, compressed or Refrigerant gas R 116	2.2	UN2193	N/A	
Nitrogen, compressed	2.2	UN1066	N/A	
Oxygen, compressed	2.2	UN1072	N/A	
Refrigerant gases, n.o.s.	2.2	UN1078	N/A	
Refrigerant gases, n.o.s or Dispersant gases, n.o.s.	2.1	NA1954	N/A	
Tetrafluoromethane, compressed or Refrigerant gas R 14	2.2	UN1982	N/A	

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packaging is a non-DOT specification steel cylinder made in conformance with § 178.35 and DOT Specification 3E (§ 178.42) except as follows:

§ 178.35(f) Markings.

All markings required except that "DOT-SP 13336-1800" must replace "DOT 3E1800".

§ 178.35(g) Inspector's report.

Applicable inspection reports required are:

- 1. Inspectors certification.
- 2. Record of chemical analysis.
- 3. Flattening test.

§ 178.42(a) Type, size, and service pressure.

Seamless tubing partially closed in at either end with closure on either end by circumferentially welded end caps. Cylinder is not over 90 cubic inch water capacity. Longitudinal seams and welded tubing are prohibited. The service pressure must be 1800 psig.

- § 178.42(b) Steel.
 - (1) Aluminum killed 1010 seamless tubing of uniform quality. Content percent may not exceed the following: Carbon 0.12, manganese 0.50, phosphorous 0.04, and sulfur 0.05 (ladle analysis); or
 - (2) Cold drawn seamless type 4130 alloy tubing. Content percent may not exceed the following: carbon (0.25-0.35), manganese (0.40-0.90), phosphorus (0.04), sulfur (0.05), silicon (0.15-0.35), chromium (0.80-1.10), molybdenum (0.15-0.25).
- § 178.42(d) Manufacture.

The last sentence is deleted.

- § 178.42(f) Hydrostatic test.
 - (1) * * *

- (2) The cylinder referred to in paragraph (f)(1) of this section must burst at a pressure higher than 6,000 psi without fragmenting or otherwise showing lack of ductility, and one additional cylinder in the same lot of 500 must be subjected to a 3000 psi test and subsequently to a flattening test between knife edges with the circumferential joint at a right angle to the plates. The knife edges must be 60° wedge shaped rounded to 1/2 inch radius. Flattening to six times the thickness of the seam joint without cracking is required. The last sentence is deleted.
- (3) Other cylinders must be examined under hydrostatic pressure of at least 3000 psig and show no defect. The pressure must be maintained for at least 30 seconds and sufficiently longer to insure complete examination.

§ 178.42(g) Leakage test.

All cylinders must be tested for leakage by internal air or gas at 1,800 psig following the hydrostatic test. Leakers must be rejected.

b. OPERATIONAL CONTROLS - Cylinders must be shipped in strong outside packagings in conformance with § 173.301(a)(9). Each cylinder must be secured against rotational movement within the outside packaging.

8. SPECIAL PROVISIONS:

- a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.
- b. A person who is not a holder of this special permit, but receives a package covered by this special permit, may reoffer it for transportation provided no modification or change is made to the package or its contents and it is offered for transportation in conformance with this special permit and the HMR.
- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

- d. Each packaging manufactured under the authority of this special permit must be marked with a <u>registration symbol</u> designated by the Office of Hazardous Materials Exemptions and Approvals for a specific manufacturing facility.
- e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.
- f. Charging of cylinders with liquefied gases must conform to the requirements in § 173.304a.
- g. Ethylene is forbidden for shipment by passenger-carrying aircraft.
- h. Transportation of oxygen is only authorized by aircraft when in accordance with § 175.501.
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only, and passenger-carrying aircraft (See restrictions in paragraphs 8.g. and 8.h. of this special permit).
- 10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel or aircraft used to transport packages covered by this special permit. The shipper must furnish a current copy of this special permit to the air carrier before or at the time the shipment is tendered.
- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 <u>et seq</u>:
 - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, Parts 171-180.
 - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.

o Registration required by \$107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

U Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—"The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

Wand By

for Dr. Magdy El-Sibaie

Acting Associate Administrator for Hazardous Materials Safety Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at

http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm.
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